NOAA FISHERIES

West Coast Region

Snake River Fall Chinook Recovery Plan Update

November 12, 2014

Discussion Topics

Update on Status of Plan

Notes on Specific Sections

- Recovery goals
- Alternative viability scenarios
- Current status assessment
- Recovery strategy

Status of Plan

- Presently in review and discussions with tribes and fine tuning
- December 2014: Review draft distributed to RCG
- January 2015: CRITFC meeting
- January 2015: U.S. v. OR Policy Committee
- January 2015: Comments back from RCG
- February 2015: Post proposed plan to Federal Reg.

Status of Chapters

1. Introduction – posted
2. Background – posted
3. Recovery Goals and Delisting – in Dec. 2014 draft
4. Status Assessment – in Dec. 2014 draft
5. Threats and Limiting Factors – posted
6. Recovery Strategy; Site Specific Mgmt Actions – posted
7. R,M&E Framework – in Dec. 2014 draft
8. Implementation and Coordination – in Dec 2014 draft
9. Cost Estimates – will be in progress 2014

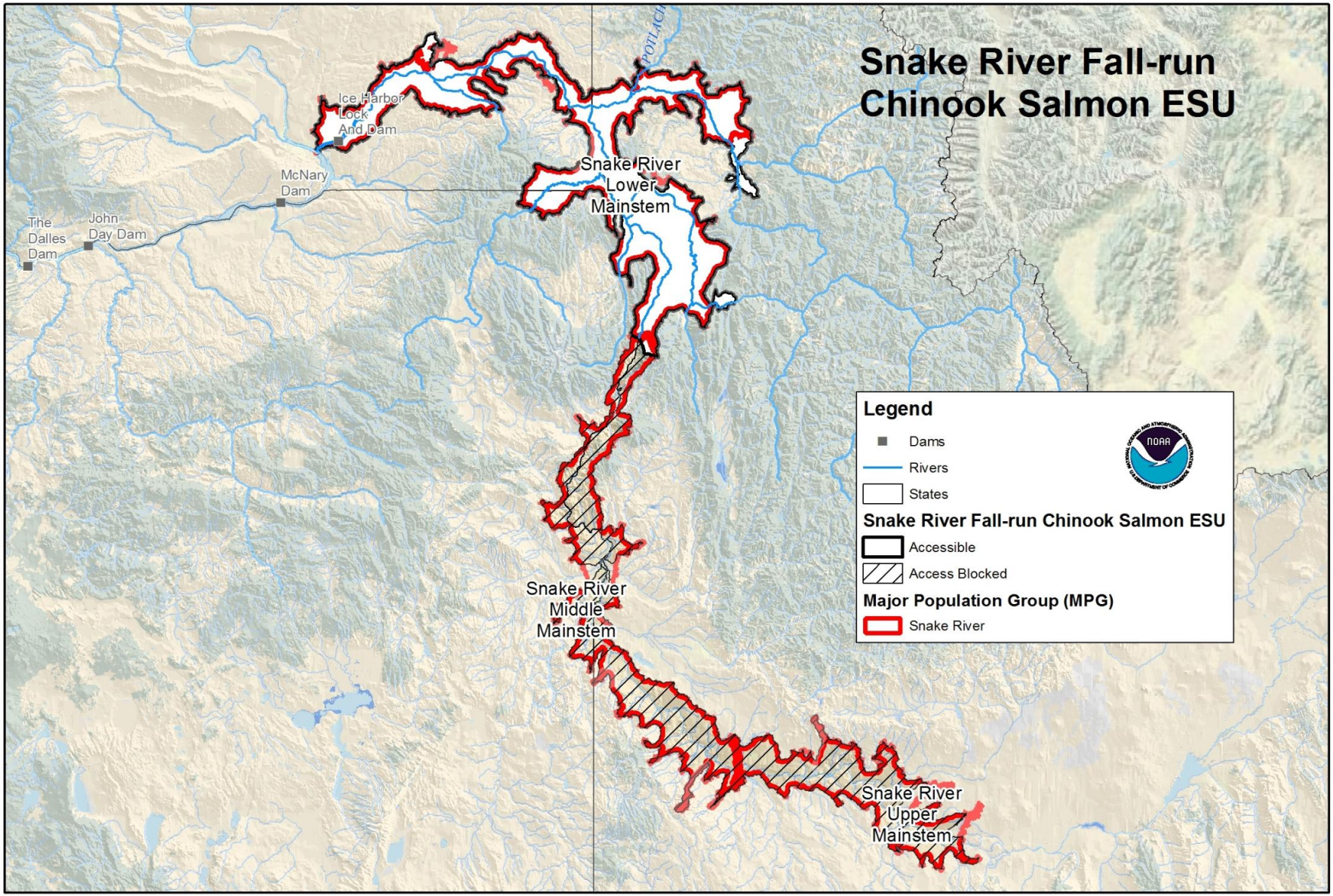
Recovery Goals

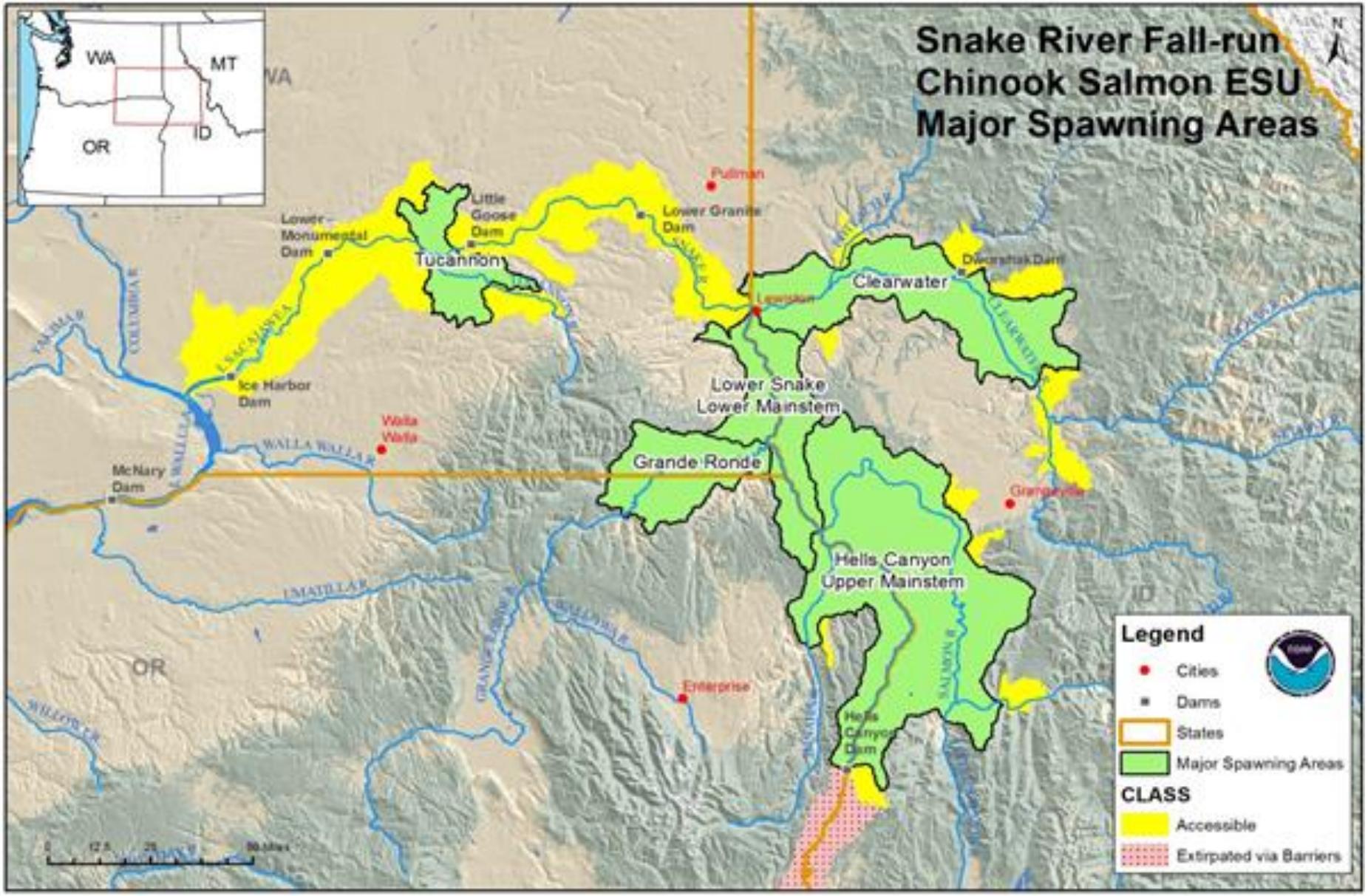
ESA: To ensure that the ESU is self-sustaining and no longer needs the protection of the ESA.

Broad Sense: typically provided by stakeholders and addresses natural production beyond ESA minimums.

- Mitigation objectives, if can meet in a manner consistent with recovery of naturally spawning populations.

Treaty Reserved Rights and Tribal Harvest – Both ESA and broad sense goals should support tribal harvest.


Snake River Fall-run Chinook Salmon ESU
Ice Harbor Lock And Dam
McNary Dam
The Dalles Dam
John Day Dam
Snake River Lower Mainstem
Snake River Middle Mainstem
Snake River Upper Mainstem
Legend
Dams
Rivers
States
Snake River Fall-run Chinook Salmon ESU
Accessible
Access Blocked
Major Population Group (MPG)
Snake River


Snake River Fall-run
Chinook Salmon ESU
Major Spawning Areas
WA
MT
OR
ID
Pullman
Little Goose Dam
Lower Granite Dam
Lower Monumental Dam
Tucannon
Clearwater
Dworshak Dam
Lewiston
Ice Harbor Dam
Lower Snake
Lower Mainstem
Walla Walla
Grande Ronde
McNary Dam
Hells Canyon
Upper Mainstem
Enterprise
Legend
Cities
Dams
States
Major Spawning Areas
CLASS
Accessible
Extirpated via Barriers

Alternative Viability Scenarios

Scenario A. At least two populations: one highly viable, the other viable, includes a population above Hells Canyon.

Scenario B. One population: highly viable with high certainty. Naturally produced fish well distributed and measured in the aggregate, across ESU.

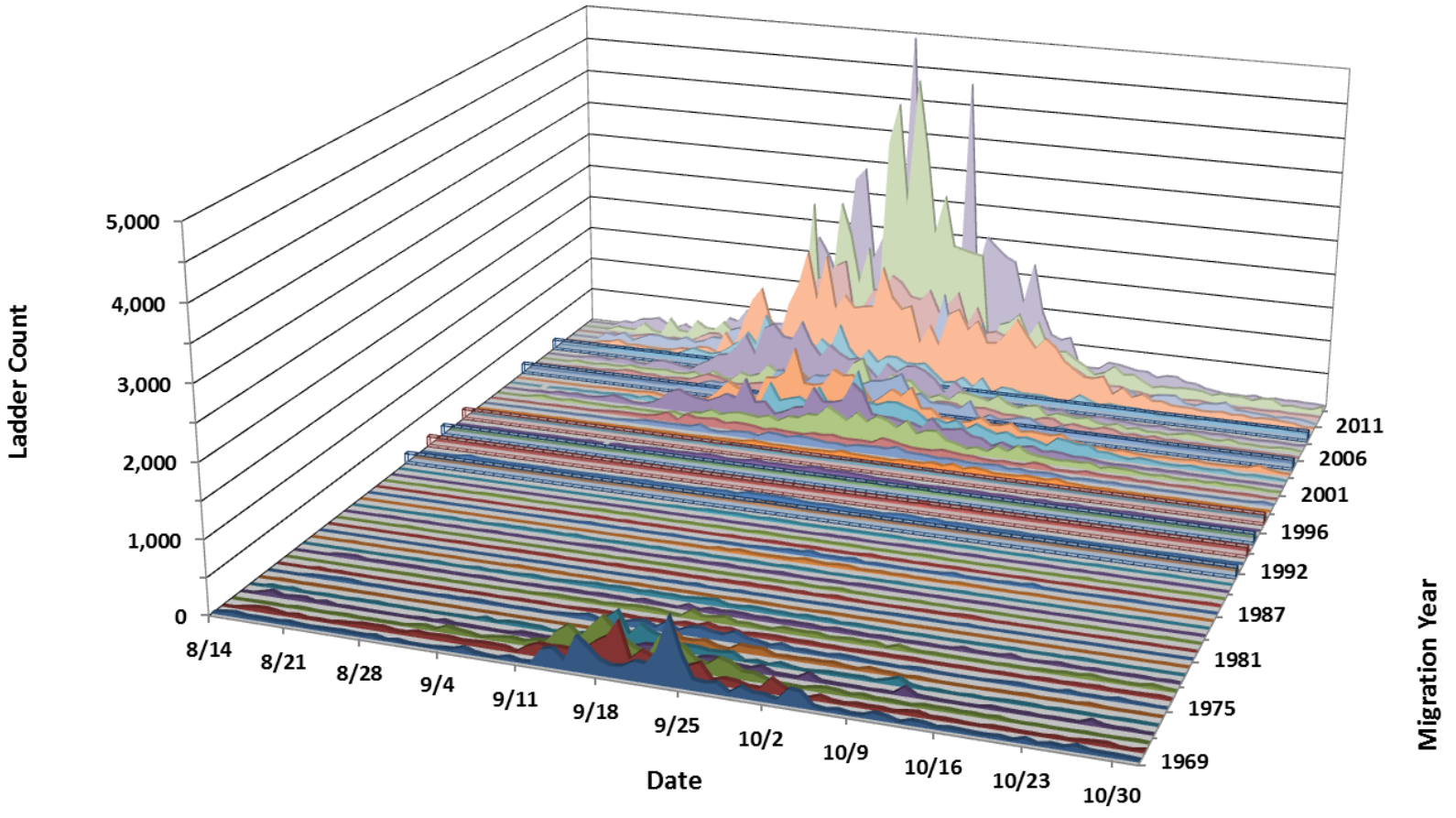
Scenario C. One population: highly viable with high certainty. Substantial proportion of natural production from prioritized spawning areas.

Species Status:

Some Key Questions for Evaluating SR fall Chinook Status

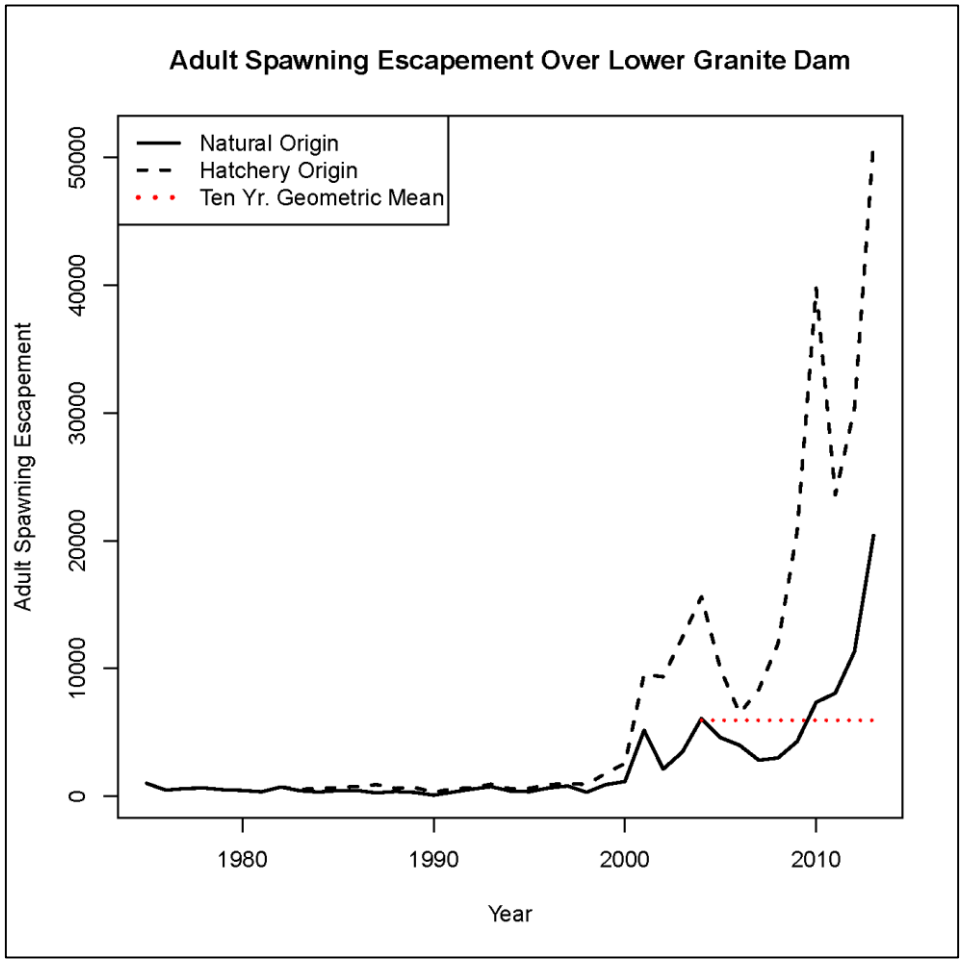
- What is the biological status of the population(s) vs VSP objectives?
- Are habitat conditions sufficient to provide for a self sustaining ESU?
  - Includes spawning/rearing habitats, FCRPS and Idaho Power Company influences
- Would the ESU sustain itself in the absence of supplementation?
- Are management controls in place to sustain viability?

Adult Fall Chinook Salmon Ladder Counts at the Uppermost Lower Snake River Dam: Lower Monumental (1969), Little Goose (1970-1974), and Lower Granite (1975-2014).



1969 1970 1971 1972 1973 1974 1975
1976 1977 1978 1979 1980 1981 1982
1983 1984 1985 1986 1987 1988 1989
1990 1991 HCC Spawning Ops 1992 1993 Harvest Reduction 1994
DWR H20 Releases 1995 1996 NPT Supplementation 1997 1998 1999
2000 2001 2002 2003 2004 24 Hour Spill 2005
2006 2007 2008 Surface Passage Routes 2009 2010 2011
2012 2013 2014

Abundance



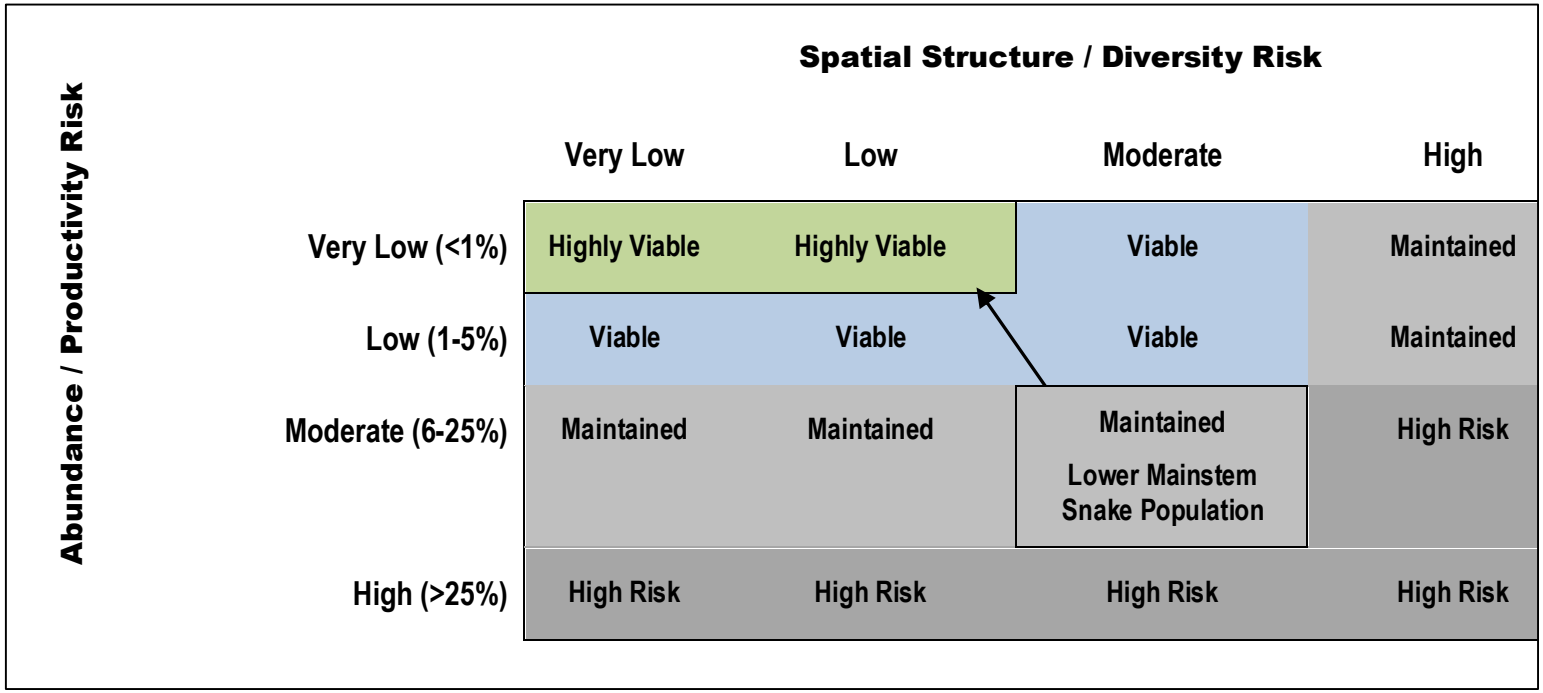
Spawner estimates for run years 1991 to 2013

Current Status Assessment

- Abundance & Productivity – Moderate Risk
  - **10 year geo mean 5,942; productivity about 1.53**
  - **Scenario B needs > 4,200; and productivity > 1.7**
  - **Scenario C needs sensitivity analysis, would be a range**
  - **Uncertainty for maintaining high numbers in long run (i.e. productivity)**

- Spatial Structure Diversity – Moderate Risk
  - **Phenotypic traits**
  - **Genetic homogeneity**
  - **High proportion and wide distribution of hatchery origin spawners**

Status Assessment



Recovery Strategy

- **Protect and Improve existing population status**
- **Pursue full range of viability scenarios**
  - Actively pursue second population above Hells Canyon
  - Protect gains and
  - Address all H protective and restorative actions in concert
  - Address Key Information Needs: e.g. evaluate relative contributions across life cycle
- **Adaptive Management and Implementation**:

evaluate, prepare and implement changes that could lead to delisting.